

ARM Manus Research Station

Site Visit 0602M Report

Visit Duration: 27 February to 03 March 2006

Manus Island, Papua New Guinea

SV-0602M

Site: Manus	Proposed Dates on Site: 27 February - 3 March 2006
Team Members: Gary Eckert, Australia BOM Elijah Gareitz, PNG NWS	Ship or hand carry prior to SV: MWR, eye wash solution, gas tester sensor cell (T. Stiles to ship), gas analyzer internal battery (T. Stiles to ship), MPL laser diode module (?), Panasonic LCL 12V 33AP 20A/hr batteries (BOM to purchase and ship), APC SU3000RM3U batteries (BOM to purchase and ship)
	Safety: Major Hazards: Caustic chemicals (KOH), Explosive gas (H2), AC electricity Hazard Controls: BOM Electrolyser Handbook, BM Electrolyzer Operations/Maintenance Training, ASNZS 4836/2001-Safe Working on LV Electrical Installations, 2-man rule
	Reminder: When replacing items (e.g., desiccant, filters, etc.), record and report the quantity of spares left on site.

Site Tasks

Priority	System	Date Completed (dd/Month)	Service Time in Hours	Tasks/Assoc Hazards-Controls For each priority item insert new line(row) for each date/time entry
1	TSI	3-Mar-06		Replace lens and refocus image
				Lens did not arrive
2	TSI	25-Feb-06	1	Seal external joint of camera housing and arm
				Done
3	TSI	3-Mar-06		Seal internal joint of arm (inside enclosure)
				TSI no longer has a water ingress problem
4	TSI	25-Feb-06	1	Check weather seal around edge of enclosure lid - Replace if it is deformed or shrunk
				Weather seal ok, checked after rain - no water ingress
5	DS	3-Mar-06		Change out UPS batteries (APC SU3000RM3U)
				Batteries not shipped
6	IRT (SKYRAD)	25-Feb-06	1	Record values of T.low and T.end at LCD display - Set to 213 and 463 K
				Values checked ok. Adjusted T.r from 3 to 1.
7	OTHER	3-Mar-06		Repair water catchment system
				Contractor to repair guttering. Temporary repairs carried by Troy during last visit; tanks are currently full.
8	CEIL	3-Mar-06		Change out internal battery
				Battery not shipped
9	GENSET	28-Feb-06	8	Replace battery cables and starter
				Hastings Deering fitter carried out maintenance.
10	HVAC	3-Mar-06		Replace all Carrier units with Daikin units and install ventilation equipments in all vans
				AE Smith to replace aircon's
11	ES&H	27-Feb-06	1	Change out U-Van eye wash bottle/solution
				No eye wash solution on site

Site Tasks				
Priority	System	Date Completed (dd/Month)	Service Time in Hours	Tasks/Assoc Hazards-Controls For each priority item insert new line(row) for each date/time entry
12	ES&H			Change out balloon barn eye wash bottle/solution
		27-Feb-06	1	No eye wash solution on site
13	BBSS			Change out gas tester sensor cell
		3-Mar-06		Sensor cell has not arrived
14	BBSS			Change out internal battery in gas analyzer
		26-Feb-06	1	Battery replaced.
15	IRT			Change out SKYRAD IRT Gold Mirror
		3-Mar-06		Gold mirrors have not arrived
16	MMCR			Change out MMCR antenna heater filters
		28-Feb-06	1	Replaced filter - 12 filters remaining.
17	MMCR			Change out MMCR fan for Radian Receiver (12VDC)
		3-Mar-06		Fan is in good condition.
18	MMCR			Change out TWTA desiccant
		3-Mar-06		Dessicant packs have not arrived
19	MMCR			Change out electronics rack UPS batteries (fed by Best Power FE700VA uses Panasonic LCL 12V 33AP 20A/hr batteries; fed by I-Van Liebert UPS 120V, 50Hz)
		3-Mar-06		Battery not shipped
20	MPL			Change out lader diode module
		25-Feb-06	1	Advice from Albert is that Diode module does not need replacing at this time. Refer email Albert to Monty 25JAN06.
21	MPL			Change out shutter timer batteries
		2-Mar-06	1	Batteries replaced
22	VSAT			Change out VSAT data system UPS batteries (APC SU3000RM3U)
		27-Feb-06		The VSAT is fed from the DS APC UPS. Refer #5.
23	OTHER			Help customize Observer PC desktop
		03-Mar-06		Hymson reports PC is ok.
24	MPL			Albert reported hardware fault in MPL. Requested open transceiver and check wiring, reseal connectors.
		25-Feb-06	1	1. Done - Albert has advised that MPL is now ok.
		26-Feb-06	1	Worked with Albert again; rebooted computer after he made configuration changes.
25	TSI			Remove the camera PC board from its housing, examine for moisture, dry (with ambient, heated air and/or canned air), and replace.
		25-Feb-06	1	Done - nil moisture evident
26	TSI			TSI camera not communicating. Fault-find and repair.
		25-Feb-06	1	Replaced connectors on camera ethernet cable.
27	HOGEN			Locate spare hogen control board, install, update firmware and load config file. Check operation.
		25-Feb-06	2	1. located spare control board.
		26-Feb-06	2	2. installed spare control board. Hogen started up - E25 failure code (CG Sensor out of calibration).

Site Tasks

Priority	System	Date Completed (dd/Month)	Service Time in Hours	Tasks/Assoc Hazards-Controls For each priority item insert new line(row) for each date/time entry
		27-Feb-06	4	3. uploaded config file; firmware update not required. Carried out gas sensor cal. Started hogen - E20 failure (rectifier #2 fail). Replace slave power supply (aka rectifier#2). Hogen now operating normally.
28	SAM			SAM not FTPing. Also D-van temp reading 65489 degrees.
		27-Feb-06	1	Worked with Rex, resolved FTP prob's. Reseated temp sensor connector, D-van temp now ok.
29	DS			Upgrade NFS and Collector BIOS and firmware
		28-Feb-06	2	NFS and collector upgraded
30	DS			Replace DS1/DS2
		2-Mar-06	4	Replaced DS1 and DS2
31				Y-van aircon
		28-Feb-06	2	Removed unserviceable Friedrich window-mount aircon from Y-van. The replacement Fujitsu is not the same physical size. The hole in the wall will need to be enlarged and a new timber frame constructed.
32	MWR			Replace MWR computer
		1-Mar-06	1	Replaced MWR computer.
33	OTHERS			
		2-Mar-06		Faulty I-van aircon has failed again.
			2	Elijah and I repaired the radio in the site vehicle.
			1	Smoke detector in D-Van - battery changed.
	SHIPPING			List items to be shipped following visit
				Hogen control board and power supply (to Darwin).
				WSI spares (shutters) to SGP
	FUTURE NEEDS			List items needed for future visits (spares, etc.)
				Eyewash. Batteries - AAA (aircon remotes), AA (MPL shutter timer), 9V (smoke detectors).